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Original Research Paper

Community Medicine

INFANT AND YOUNG CHILD FEEDING PRACTICES AMONG MOTHERS ATTENDING IMMUNIZATION CLINIC IN TERTIARY HEALTH CARE CENTRE, HARYANA

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ABSTRACT

INTRODUCTION: Childhood malnutrition rates are high in the country with 43% children in India under five years reported to be underweight and 48% are stunted. The steep rise in malnutrition in children during the first two years of life is indicative of poor infant feeding practices so optimal infant and young child feeding (IYCF) practices are the key to improving child survival rates.

RATIONALE: Most of the studies conducted in India have focused on mainly the breastfeeding aspects and not on the dietary diversity and diet frequency aspects, which are important in IYCF.

AIM & OBJECTIVE: This study was done to assess the IYCF practices among mothers attending immunization clinic of PGIMS Rohtak.

MATERIAL & METHODS: hospital based cross-sectional study done among mothers having children of 0-23 months using pretested semi structured interview schedule over 3 month duration .

RESULTS: 51% mothers' timely initiated breastfeeding at birth. 70% mothers did not exclusively breastfeed their babies up to 6 months. Age appropriate complementary feeding was started in 57% children. MMF among breastfed was 36.6%. MDD and MAD was observed in 45% & 32%.

KEYWORDS : IYCF Practices, IYCF Indicators

INTRODUCTION

Malnutrition is a problem of staggering size worldwide and continues to threaten the health and wellbeing of millions in India. The prevalence of malnourished children is highest in the world. High proportion of undernutrition combined with the large population base, had made India the country with the largest number of stunted, underweight and wasted children. Malnutrition is widespread across the country in all states. Haryana is one of the prosperous states in India and second highest contributor of grains to country's central pool. High economic growth in the state is accompanied by a significant reduction in rural poverty and improved human development indicators. Despite significant development, Haryana exhibits high rates of undernutrition and Malnutrition continues to be a development challenge in Haryana.[1] The ongoing programmes are making efforts to improve nutrition but anaemia and undernutrition among children and pregnant women are rising alarmingly in Haryana. India has issued the National Guidelines on Infant and Young Child Feeding in 2006 to tackle the problem of malnutrition among children. Most of the studies conducted in India have focused on mainly the breastfeeding aspects and not on the dietary diversity and diet frequency aspects, which are important in IYCF. So, this study was done to assess the IYCF practices among mothers attending immunization clinic of PGIMS Rohtak.

METHODOLOGY

Hospital based cross-sectional study was done among mothers having children of 0-23 months using pretested semi structured interview schedule over period of 3 months. A pretested questionnaire mainly based on the standard questionnaire on IYCF practices given by WHO was used for data collection.[2] These questions provide the information needed to calculate the 10 key indicators of IYCF. As per WHO recommendations, information was collected about the child's diet in the previous 24 hours, which included the type of food items and the number of times they had consumed. Food items were categorized in seven types, that is, cereals, legumes and nuts, dairy products, meat products, egg, vitamin A rich fruits and vegetables, and other fruit and vegetables. Children less than 24 months were included in the study after obtaining verbal informed consent from the mother. Those children not accompanying their mother were excluded. Immunization clinic for children is used to be held every day at this tertiary care centre and all the mothers coming for immunization with their children were included in the study. Total 300 mothers were included in the study. Data were analyzed by using Statistical Package for Social Sciences (SPSS) version 20.0

RESULTS

Out of the total 300 children, a majority, that is, 70.9% were tenants whose mean duration of living in that area was 6years. 60% were male and 40% were female. Majority 60% belonged to middle class and 30% belonged to lower class of the modified Kuppuswamy socioeconomic status scale and 10% belonged to upper class. Nearly 20% of the mothers were illiterate, 62% were educated less than intermediate, whereas18 % were educated intermediate and above. Out of the total 300 children, 25.0% of the children were of birth order three or more, whereas the remaining 75.0% were of birth order less than three. Table 1 shows the status of IYCF practice indicators. Of total 300 children 150 were of 0-6 months and 150 were 6-23 months.

DISCUSSION

Out of the total studied children, 51% were put on breastfeeding within one hour of birth. National Family Health Survey – 3 (NFHS-3) data at the national level [3]and also for Haryana [4] showed it as 50.5 % and 42.4%, respectively, for children aged under 3 years. Study from West Bengal[5] had shown it much lower as 13.6%. An epidemiological evidence of a causal association between early initiation of breastfeeding and reduced infection-specific neonatal mortality has also been documented.[6] In present study, pre-lacteal feed was given to 40% of the studied children, which is much higher than a study at Uganda[7] (43%), & the study from WestBengal[5] (26.7%). Although this practice has been found to be prevalent across the cultures, there is an international consensus that providing other liquids in addition to breast milk in the first 6 months of life is unnecessary and harmful.[8] Exclusive breastfeeding was done by 30.0% of children under 6 months

of age. This was better than the figures reported by NFHS-3 data, at state level[4] (16.9%) but lower than NFHS-4 data for state. A study from slum of Delhi has shown that only 20% of the children below 6 months were exclusively breastfed.[9] Studies have reported that about one-fourth of the children who received liquids and solids, along with breastfeeding at 0–6 months of age, remained at risk for infectious diseases and undernutrition.[10]

Out of the 150 children aged between 6 and 9 months, more than half (55.6%) were having complementary feeding. This was found to be higher than that reported by NFHS-4 data for haryana[4] A wide variation in the proportion of children who received complementary feeding at 6–9 months of age was reported from two other studies done in India, that is, 71.7% in Kolkata[11] and 38.7% in Allahabad.[12] Minimum dietary diversity (MDD) indicator is the proportion of children 6–23 months of age who receive foods from 4 or more food groups from a total of seven food groups, namely, dairy products, legumes and nuts, flesh foods, eggs, vitamin A rich fruits and vegetables, cereals and tubers, and other fruits and vegetables.[2] This indicator reveals whether the child is receiving a complete and balanced diet or not. MDD was observed in only 44.6% of the children between 6 and 23 months. Minimum meal frequency (MMF) indicator is the proportion of breastfed and nonbreastfed children aged 6–23 months who receive solid, semi-solid, or soft foods (but also including milk feeds for nonbreastfed children) the minimum number of times or more.[8] For breastfed children the minimum number of times varies with age (two times if 6–8 months and three times if 9–23 months). For nonbreastfed children, the minimum number of times does not vary by age (four times for all children aged 6–23 months). MMF was observed in about 36.6% of children aged 6–23 months. Minimum acceptable diet (MAD) indicator is the proportion of children aged 6–23 months who receive at least the MDD as well as at least the MMF according to the definitions mentioned above.[2] This was found to be adequate only in 32.2 % of the 6 to 23 month-old children.

NFHS-4 data from Haryana have reported that only 7% of children aged 6–23 months are fed the recommended minimum times per day and only 7% are fed from the appropriate number of food groups.[4] The difference in proportions between male and female children was not significant at the level of 0.05 by Chi- square test for any of the IYCF practice indicator status.

Table 1: IYCF practice indicators

IYCF practices	YES	NO
Timely Initiation of Breastfeeding	76(50.6)	74 (49.3)
Exclusive Breastfeeding	45(30)	105(70)
Timely Complementary Feeding	85(56.6)	65(43.3)
Continued breastfeeding at one-year (12-15 months) n=202	28(18.6)	122(81.3)
Minimum Meal Frequency breastfed (6-23 months)	55(36.6)	119(63.3)
Minimum Diet Diversity	67(44.6)	83(55.3)
Minimum Acceptable Diet	48(32)	102(68)
Consumption of iron rich foods	57(38)	93(62)

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